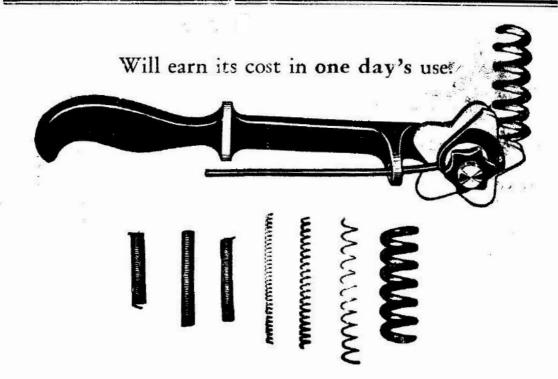
HJORTH PERFECTION SPRING WINDER



ADOPTED by the leading manufacturers and machinists as standard for precision winding of extension, compression and torsion springs. Also adapted to wind taper, double taper and left-hand springs. Makes springs any length, diameter or pitch from any gauge wire. No wire wasted: winds to last inch.

The tool is designed to support the smallest arbor, which feature obviates "kinking" of the spring when being wound. Will use flat square wire. Can be used in connection with vice, lathe or drill press.

No. 1—Capacity 0 thru 3/32 inch wire—Price \$4.00

No. 2-Capacity 0 thru 3/16 inch wire-Price \$6.00

No. 3-Capacity 0 thru 5/16 inch wire-Price \$10.00

Manufactured by

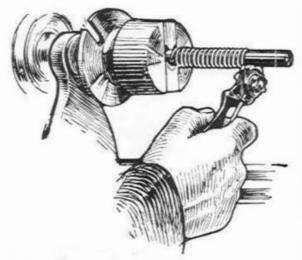
HJORTH LATHE & TOOL COMPANY

12 BEACON STREET

WOBURN, MASS.

DIRECTIONS FOR USING THE

Hjorth Perfection Spring Winder



USED IN LATHE OR DRILL PRESS

Select on spacing washer a web of the thickness desired, and adjust in position as shown in the illustration.

Pass end of spring wire through hole in lug cast on handle, then between spacing and tension washers, at same time passing through hole in stud on which washers rotate.

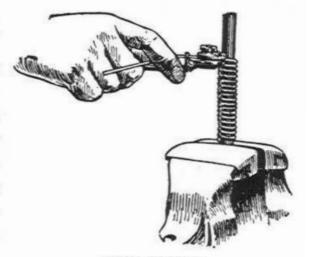
Fasten to arbor the end of spring wire thus drawn through, rest the arbor on the

V portion of the washers, tighten up nut on stud to get required tension, and proceed to wind spring.

To wind extension or close spring, reverse position of spring winder, having the nut end of the stud face the starting point. Tension, or outside, washer should point downward and not come in contact with arbor, but should be tightened sufficiently for friction purpose. Spacing washer should rest on arbor and slight pressure be given in direction of starting point.

To wind left-hand compression spring, start spring from end of arbor.

To wind left-hand extension spring, start at end of arbor, following instructions covering the winding of regular close springs. Used in connection with vice, the operator carries the tool around the arbor. In all cases, the wire, as it passes through the washers, should drag, rather than pass through loosely.



USED IN VICE